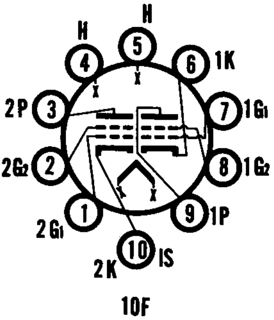


SYLVANIA TYPES 6C9 17C9

VHF DUO TETRODE



MECHANICAL DATA

Bulb	T-6½
Base	E10-73, 10 Pin, Center Pin Added to E9-1 Base
Outline	6-13
Basing	10F
Cathode	Coated Unipotential
Mounting Position	Any

ELECTRICAL DATA

HEATER CHARACTERISTICS AND RATINGS

Average Characteristics

	17C9 Series	6C9 Parallel	
Heater Voltage	16.8	6.3[1]	Volts
Heater Current	150[1]	400	Ma

Ratings (Design Maximum Values)

	Min-Max	Min-Max	
Heater Voltage[2]	.. - ..	5.7 - 6.9	Volts
Heater Current[2]	140 - 160	.. - ..	Ma
Maximum Heater-Cathode Voltage			
Heater Negative with Respect to Cathode			
Total D C and Peak	200	200	Volts
Heater Positive with Respect to Cathode			
D C	100	100	Volts
Total D C and Peak	200	200	Volts

DIRECT INTERELECTRODE CAPACITANCES (Shielded)

	Section 1	Section 2
Grid No. 1 to Plate	.055	.06 μμf Max.
Input: 2g1 to (h+2k, I.S.+2g2+E.S.)	..	4.2 μμf
1g1 to (h+1k, 1g2,+2k, I.S.+E.S.)	4.4	.. μμf
Output: 2p to (h+2k, I.S.+2g2+E.S.)	..	2.2 μμf
1p to (h+1k,+1g2+2k, I.S.+E.S.)	2.2	.. μμf
Heater to Cathode	4.2	4.8 μμf
Coupling:		
Section 1 Plate to Section 2 Plate		.003 μμf Max.
Section 1 Grid No. 1 to Section 2 Grid No. 1		.001 μμf Max.
Section 1 Grid No. 1 to Section 2 Plate		.001 μμf Max.
Section 2 Grid No. 1 to Section 1 Plate		.032 μμf Max.

RATINGS (Design Maximum Values)

Plate Voltage	250 Volts Max.
Grid No. 2 Supply Voltage	180 Volts Max.
Grid No. 2 Voltage	See 6AM8 Rating Chart
Plate Dissipation (Both Plates)	2.5 Watts Max
Plate Dissipation (Each Section)	1.5 Watts Max
Grid No. 2 Dissipation (Each Section)	0.5 Watts Max
Cathode Current (Each Section)	20 Ma Max.

CHARACTERISTICS AND TYPICAL OPERATION (Each Section)

Plate Voltage	125 Volts
Grid No. 2 Voltage	80 Volts
Grid No. 1 Voltage	−1 Volt
Plate Current	10 Ma
Grid No. 2 Current	1.5 Ma
Transconductance	8000 μmhos
Plate Resistance (approx.)	0.1 Megohm
Grid No. 1 Voltage for Ib = 20 μa (approx.)	−6 Volts

NOTES:

1. For series/parallel operation of heaters, equipment should be designed that at normal supply voltage bogey tubes will operate at this value of heater current/voltage.
2. Heater voltage supply variations shall be restricted to maintain heater voltage/current within the specified values.

APPLICATION

Types 6C9 and 17C9 are duo tetrodes contained in a T-6½ 10 pin bulb. They are designed for service as VHF RF amplifiers and VHF autodyne mixers. Except for heater characteristics, Types 6C9 and 17C9 are identical.

SYLVANIA TYPES 6C9, 17C9 (Cont'd)

AVERAGE TRANSFER CHARACTERISTICS

